



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/554,884 | 08/22/2000 | Bertil Larsson | 9847-0049-6X | 9102 |

22850 7590 12/14/2001

OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT PC
FOURTH FLOOR
1755 JEFFERSON DAVIS HIGHWAY
ARLINGTON, VA 22202

EXAMINER

ENAD, ELVIN GENARGUE

ART UNIT PAPER NUMBER

2834

DATE MAILED: 12/14/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/554,884

Applicant(s)
Larsson

Examiner
Elvin Enad

Art Unit
2834



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on May 15, 2001
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-39 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other: _____

Art Unit: 2834

DETAILED ACTION

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent application No. PCT/SE98/02162, filed on November 27, 1998.

Information Disclosure Statement

2. Receipt is acknowledged of the information disclosure statement papers filed on August 22, 2000 and April 04, 2001. The papers have been placed in the application file. A signed copy of the IDS will be provided when application is allowed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 20-22 and 39 are rejected under 35 U.S.C. § 102(b) as being fully anticipated by Madsen (USP 3,932,779).

Madsen discloses a turbo-generator including a plurality of thin pressure tubes of a deformable material such as copper positioned in the slots between the wedges and the windings. The pressure tubes are supplied with a thermosetting resin through feed tubes, the resin being supplied at a sufficient pressure and in a sufficient amount to produce an expansion of the space within the tube by at least 50 per cent. The feed tube is then subjected to heat in a localized area,

Art Unit: 2834

thus accelerating the curing of the resin in this area of the tube and forming a plug, after which the supply of pressure to the pressure tube is disconnected. After the resin in the pressure tube has hardened, the feed tube is removed.

5. Claims 23-28 are rejected under 35 U.S.C. § 102(b) as being fully anticipated by Wood (UK 1,135,242).

Wood discloses a rotating electrical machine comprised of a stator having slots with a flat side and undulated side, the slots provided with a resilient body (tube) in order to restrict movement of the conductors. Wood, as seen in the figures, teaches various arrangements of the packing means such that it would exert pressure either or both radially and/or tangentially against the conductors and the slot wall. The packing means may be made of an elastomeric material such as silicon rubber.

6. With regard to claims 25-26, note that Wood discloses having his elastic tube made of silicon rubber. Moreover, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select a material such as polyethylene or similar to that as claimed by applicant, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Art Unit: 2834

7. With regard to claim 27, note figures 2-5 wherein the packing means are formed in various shapes in order to maintain uniform pressure on the conductors. Moreover, it would have been an obvious matter of design choice to have the tube shaped triangular or any particular shape, since such a modification would have involved a mere change in the size or shape of a component. A change in size or shape is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 29,31,32,34 and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wood (UK 1,135,242) and Elton (USP 4,853,565).

Wood discloses the claimed invention except for having the stator winding strands comprised of semiconducting layers.

Elton ('565) discloses a cable with stranded conductors surrounded by a first inner semiconducting insulation layer (104), an intermediate solid insulation layer (106) and an outer semiconducting insulation layer (110) which is connected to ground. Such an arrangement, as

Art Unit: 2834

disclosed by Elton helps to prevent corona discharge between the cable and the surrounding elements.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided in the machine of Wood winding having layers with semiconducting properties as disclosed by Elton, in order to prevent corona discharge from the winding.

10. Claim 30 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wood and Elton and further in view of Takaoka.

Wood and Elton ('565) disclose the claimed invention except for utilizing a particular cable diameter and conducting area.

Takaoka et al. in column 1, lines 22-29 teach that the selection of the particular diameter of the conductor size is contingent upon the amount of power that is transmitted.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have use a conductor having a diameter similar to that as claimed by applicant to the winding of Wood since according to Takaoka, the selection of the particular cable diameter is contingent upon the amount of power desired to be transmitted. Moreover, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Art Unit: 2834

11. Claim 33 and 35-37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wood (UK 1,135,242) and Elton (USP 4,853,565) and further in view of Elton et al. (USP 4,622,116).

Wood and Elton et al. ('656) disclose the claimed invention except for having the semiconducting layers and the insulation the same coefficient of thermal expansion.

Elton et al. ('116), teach in column 7, lines 38-44, that it is known to form different overlapping insulations with the same coefficient of thermal expansion in order to prevent thermal stress which would separate and crack the materials causing failure of the insulation.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to formed the insulation of Wood and Elton et al. ('565) such that the different layers of insulation have similar or the same coefficient of thermal expansion as taught by Elton et al. ('116) in order to prevent thermal aging and cycling.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elvin Enad whose telephone number is (703) 308-7619.

13. Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956. The fax phone number for this Group is (703) 305-3431 (32).

Application/Control Number: 09/554,884

Page 7

Art Unit: 2834

A handwritten signature in black ink, appearing to read 'Elvin Enad', with a stylized flourish at the end.

Elvin Enad
Primary Examiner
Art Unit 2834
12.07.2001